

AMENDMENTS TO THE SPECIFICATION

Please amend paragraphs [0006], [0007], [0009], and [0013] through [0018], and the Abstract of the Disclosure, as follows:

[0006] The invention provides a transmission and torque limiting assembly for transmitting rotation from a drive to a compressor. The assembly includes a driven member for rotation by the drive about an axis. A drive member is disposed about and coaxial with the driven member. A mechanism transmits rotation ~~from~~ to the driven member ~~to~~ from the drive member and disengages the ~~drive~~ driven member from the ~~driven~~ drive member in response to a predetermined reactive force between the members. ~~Cams are presented by the driven member, and~~ The driven member comprises spring arms extend resiliently and spirally ~~from the drive member~~ to distal ends and cams pivotally attached at the distal ends. The ~~arms~~ cams engage ~~the cams posts on the drive member~~ to transmit rotation from the ~~driven~~ drive member to the ~~drive~~ driven member. The arms also move resiliently and radially to allow the distal ends to spring past the ~~cams posts~~ in response to the predetermined reactive force.

[0007] Accordingly, the subject invention overcomes the limitations of the related art by providing a torque limiting assembly featuring a simplified mechanism that not only transmits rotation from a ~~driven~~ drive member to a ~~drive~~ driven member, but also

disengages the drive member from the driven member to prevent inadvertent damage to the engine or other source providing power to the driven member. This is achieved by providing a unique ~~drive~~ driven member with integrally formed spring arms and cams that selectively disengage complementary ~~cams~~ posts located on the ~~driven~~ drive member.

[0009] Figure 1 is a perspective view of a torque limiting assembly according to one embodiment of the present invention with the ~~cam followers~~ cams engaging the ~~cams~~ posts in a locked position;

[0013] Figure 5 is a side view of the torque limiting assembly with the ~~cam followers~~ cams released from the ~~cams~~ posts.

[0014] Referring to the Figures, wherein like numerals indicate like or corresponding parts throughout the several views, a transmission and torque limiting assembly for transmitting rotation from a drive to a compressor is shown generally at 10. The assembly 10 includes a ~~driven~~ drive member 12 for rotation by the drive about an axis 14 in the direction "D₁" shown. A ~~drive~~ driven member 16 is disposed ~~about~~ within and coaxial with the ~~driven~~ drive member 12. The ~~driven~~ drive member 12 is operatively connected to an engine or other suitable power source by a belt assembly (not shown).

[0015] The assembly 10 also includes a mechanism 18 for transmitting rotation from the ~~driven~~ drive member 12 to the ~~drive~~ driven member 16. The mechanism 18 also disengages the ~~drive~~ driven member 16 from the ~~driven~~ drive member 12 in response to a predetermined reactive force component " F_{RX} " between the members 12 and 16. This is achieved through cams 26 20, which are pivotally attached to spring arms 22 ~~presented by the driven member 12~~. Spring arms 22 extend resiliently and spirally from the ~~driven~~ drive member 12 to distal ends 24 for engaging the cams 26 20 to transmit rotation from the ~~driven~~ drive member 12 to the ~~drive~~ driven member 16. Using the spring arm 22 shown in Figure 4 as a representative example, each spring arm 22 also resiliently moves radially in the direction " D_2 " shown to allow the distal end 24 to spring past the cam 26 20 in response to the predetermined reactive force component " F_{RX} ".

[0016] The distal ends 24 include ~~cam followers 26~~ for engaging the cams 26 20 to transmit the rotation from the ~~driven~~ drive member 12 to the ~~drive~~ driven member 16. As is shown in Figure 5, the ~~cam followers 26~~ are released from a post 32 axially extending from a bolt 20 attached to drive member 12 ~~the cams 20~~ in response to the predetermined reactive force component " F_{RX} " as the spring arms 22 move resiliently. Each ~~cam follower 26~~ includes a pivot 28 that pivotally connects the cam follower 26 to one of the distal ends 24. Each ~~pivot 28 cam 26~~ has a recess 30 for receiving a selected one of the ~~cams 20 posts 32~~ to move the ~~cam follower 26~~ out of a locked position such as that shown in Figure 1. ~~The cams 20 include posts 32.~~ Each recess 30 is complementary to each post 32.

[0017] Although any suitable device may be used, the ~~driven~~ drive member 12 is a pulley 34 with a planar face 35. The pulley 34 also includes an outer surface 36 in which grooves 37 are formed for engaging a belt (not shown) to operatively connect the pulley 34 to the engine or other power source. The posts 32 extend axially from the planar face 35. A hub 38 is coaxially disposed within the pulley 34. The spring arms 22 are integrally formed with the hub 38 and extend radially and spirally between the hub 38 and the posts 32. This positions the ~~cam-followers~~ cams 26 so that they can engage the posts 32.

[0018] A stop pin 40 is carried by each of the ~~cam-followers~~ cams 26. The stop pin 40 reacts with the adjacent distal end 24 to limit pivotal movement of the cam follower 26 in one direction. This maintains each cam follower 26 in the locked position shown in Figure 1 to permit transmission of rotation from the ~~driven~~ drive member 12 to the ~~drive~~ driven member 16. As is shown in Figures 4 and 5, this also allows pivotal movement of each cam follower 26 out of the locked position in response to the predetermined reactive force component " F_{Rx} ".

Please amend the ABSTRACT OF THE DISCLOSURE as follows:

A torque limiting device features spring arms that extend resiliently and spirally from a ~~drive~~ driven member to distal ends rotatably supporting ~~cam-followers~~ cams that

engage cam posts on a ~~driven~~ drive member to transmit rotation from the ~~driven~~ drive member to the ~~drive~~ driven member. In response to a predetermined reactive force, the spring arms are resilient and move radially, and the ~~cam-followers~~ cams rotate to allow the distal ends to spring past the cam posts in response to a predetermined reactive force.